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#### ABSTRACT

Part of a series on preprimary enrollment begun in 1964, this report provides 18 tables of data and commentary about 3-to 5-year-old children in preprimary programs. Most of the data is about the children and their families. Family income, education, race, employment, home area, and characteristics of the mother are studied to give a clearer picture of the children served by preprimary programs. Also provided is information on the public and private sectors offering the programs. The data are derived from special tabulations prepared for the Center for Education Statistics from the October 1983 Current Population Survey conducted by the U.S. Bureau of the Census. Appendices provide definitions and information on the source and reliability of estimates. (RH)

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#### **Foreword**

This report provides data about 3- to 5-year-old children in preprimary programs. Most of the data is about the children and their families. Family wealth, education, race, employment, home area, and characteristics of the mother are studied to give a clearer picture of the children served by preprimary programs. There is also information on the public and private sectors providing the programs. The data are derived from special tabulations prepared for the Center for Education Statistics from the October 1983 Current Population Survey (CPS) conducted by the U.S. Bureau of the Census.

The report is part of a series on preprimary enrollment begun in 1964 and published by the Center for Education Statistics. The previous report in the series presented preprimary enrollment data for 1980.

Branch Chief Carrol Kindel Division Director Paul Planchon

**April 1987** 



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## 1983 Preprimary Enrollment Characteristics

## **Enrollment Rates, by Age and School Level**

In October 1983, almost 5.4 million children 3 to 5 years old attended nursery schools or kindergartens that provided at least 2 hours of educational experience per day. These 5.4 million children represented almost 53 percent of the 3-to 5-year-old populat.on (table 1). The rate of enrollment differed significantly by age group: 85 percent for 5-year-olds, 47 percent for 4-year-olds, and 28 percent for 3-year-olds.

Of enrolled 5-year-olds, 79 percent were in kindergarten and 6 percent in nursery school. Of 4-year-olds, 12 percent

were in kindergarten and 36 percent in nursery school. Of 3-year-olds, 2 percent were in kindergarten and 26 percent in nursery school.

Public programs enrolled 60 percent of the 3- to 5-year-old population in preprimary education (table 2). A look at nursery schools and kindergartens separately, however, shows a striking enrollment difference between public and private programs. Almost 66 percent of nursery school children were in private programs. Yet, 80 percent of kindergartners were enrolled in public programs. The reason for the difference is clear: 12,200, or 85 percent, of the public school districts with preprimary programs offered kindergarten. Only 2,100, or 15 percent, offered nursery school.<sup>2</sup>

Table 1.—Population and preprimary enrollment of 3- to 5-year-olds, by level and age: 50 States and D.C., fall 1983

A	Domulation	Enrollment						
Age	Population	Total	Nursery school	Kindergarter				
		(Num	ber, in thousands)					
Total	10,252	5,385	2,347	3,038				
3 years	3,573	1,005	945	60				
4 years	3,413	1,619	1,215	404				
5 years	3,266	2,762	187	2,574				
			(Percent)					
Total	100	52.5	22.9	29.6				
3 years	100	28.1	26.4	1.7				
4 years	100	47.4	35.6	11.8				
5 years	100	84.6	5.7	78.8				

Note.-Details may not add to totals because of rounding.



<sup>&</sup>lt;sup>1</sup> See appendix A for definitions of preschool, preprimary, nursery school, and kindergarten.

Note.—The data in this report are national estimates generated from a sample survey of households. They are subject to sampling and nonsampling errors discussed in appendix B.

<sup>&</sup>lt;sup>2</sup> Unpublished tabulations from the National Center for Education Statistics' Common Core of Data, fall 1983.

Table 2.—Preprimar, enrollment of 3- to 5-year-olds, by level and attendance status, and by control of program: 50 States and D.C., fall 1983

Control	Total		Level	Attendance status		
Total Public	programs	Nursery	Kindergarten	Part-day	Full-day	
			(Number, in thousands)			
Total	5,385	2,347	3,038	3,700	1,686	
Public	3,225	809	2,416	2,215	1,010	
Private	2,160	1,538	623	1,485	676	
			(Percent)			
Total	100.0	100.0	100.0	100.0	100.0	
Public	59.9	34.5	79.5	59.9	59.9	
Private	40.1	65.5	20.5	40.1	40.1	

## Enrollment Rates and Race/Ethnicity, by Level, Public/Private Control, and Full/Part-Day Status

White children enrolled in preprimary programs at only slightly higher rates than blacks,<sup>3</sup> 53 percent to to 49 percent. Whites and blacks had similar enrollment rates at nursery school (23 percent and 21 percent) and kindergarten levels (30 percent and 28 percent, respectively) (table 3).

The Hispanic preprimary enrollment rate was lower than the non-Hispanic rate, 43 percent compared to 54 percent (table 4). Most of the difference was at the nursery school level, where the enrollment rate was 11 percent for Hispanic children and 24 percent for non-Hispanic children In kindergarten, the enrollment rate was about 30 percent for both groups.

Black and Hispanic children enrolled in public or private programs at markedly different rates than white children in 1983 (table 5). Public programs enrolled 80 percent of blacks and 76 percent of Hispanics, compared with 57 percent of whites. The disparity is most noticeable in nursery schools. Public schools enrolled 29 percent of whites but 66 percent of blacks and 56 percent of Hispanics (table 6). In public kindergartens, the gap was narrower—89 percent for blacks, 84 percent for Hispanics, and 78 percent for whites.

For full-day and part-day preprimary enrollment, the public/private split is the same; 60 percent public, 40 percent private. By race/ethnicity, the public/private split differs for whites and blacks (table 7). For white the public/private split for full-day and part-day attendance is similar; about 55 percent public/45 percent private. For blacks, the public/private split is 73/27 percent in full-day programs and 87/13 percent in part-day programs. For Hispanics, 71/29 percent in full-day programs and 80/20 percent in part-day programs.



<sup>&</sup>lt;sup>3</sup> Blacks are reported separately and are also included in the "other races" category They are reported this way for comparability with previous publications in this series. Hispanics were not identified with racial groups

in the Current Population Survey (CPS) tables. They were counted separately, but unknown numbers of Hispanics are included in white, black, and "other races" data.

Table 3.—Preprimary enrollment of 3- to 5-year-olds, by level and race: 50 States and D.C., fell 1983

Race	Domulatio-	Total		Level			
Nace	Population	enrolled	Nursery	Kindergarter			
		(Number,	in thousands)				
Total	10,252	5,385	2,347	3,038			
White	8,336	4,430	1,929	2,502			
Other races	1,916	955	418	536			
Black	1,555	758	326	432			
		(Pe	rcent)				
Total	100	52.5	22.9	29.6			
White	100	53.1	23.1	30.0			
Other races	100	49.8	21.8	28.0			
Black	100	48.8	20.9	27.8			

Table 4.—Hispanic and non-Hispanic 3- to 5-year-old children enrolled in nursery and kindergarten programs: 50 States and D.C., fall 1983 (numbers in thousands)

Ethnicity		Tot	tal	Nur	sery	Kindergarten		
	Population	Number enrolled	Percent	Number enrolled	Percent	Number enrolled	Percent	
Total	10,252	5,385	52.5	2,347	22.9	3,038	29.6	
Hispanic Non-Hispanic	949 9,303	406 4,979	42.7 53.9	108 2,239	11.3 24.1	298 2,740	31.4 29.8	

Table 5.—Preprimary enrollment of 3- to 5-year-olds in public and private programs, by race/ethnicity: 50 States and D.C., fall 1983

Race/ethnicity	Nt	ımber (in thousa	nds)	Percent			
	Total	Public	Private	Total	Public	Private	
Total	5,385	3,225	2,160	100	59.9	40.1	
White	4,430	2,508	1,922	100	56.6	43.4	
Other races	955	717	238	100	75.1	24.9	
Black	758	599	159	100	79.0	21.0	
Hispanic*	406	309	96	100	76.1	23.6	

<sup>\*</sup>Hispanics are also in white, black, and other races categories. Note.—Details may not add to totals because of rounding.



Table 6.—Preprimary enrollment of 3- to 5-year-olds, by level, control, and race/ethnicity: 50 States and D.C., fall 1983

Do o o /o the minister		Nursery school	l		Kindergarten	
Race/ethnicity	Totai	Public	Private	Total	Public	Private
			(Number, in t	housands)		
Total	2,347	809	1,538	3,038	2,416	623
White	1,929	563	1,366	2,502	1,946	536
Other races	418	246	172	536	470	67
Black	326	215	111	432	384	48
Hispanic*	108	60	48	298	250	48
			(Percei	nt)		
Total	100	34.4	65.5	100	79.5	20.5
White	100	29.2	70.8	100	77.8	22.2
Other races	100	58.9	41.1	100	87.5	12.5
Black	100	66.0	34.0	100	88.9	11.1
Hispanic*	100	55.6	44.4	100	83.9	16.1

<sup>\*</sup>Hispanics are also in white, black, and "other races" categories.

Table 7.—Preprimary enrollment, by full-day/part-day attendance, by program control, and by race/ethnicity: 50 States and D.C., fall 1983

		Preprimary enrollment									
Race/ethnicity	Terel	Full	-day	7.1	Part-day						
	Total	Public	Private	Total	Public	Private					
			(Number, in	thousands)							
Total	1,686	1,010	676	3,699	2,215	1,484					
White	1,174	650	526	3,256	1,858	1,396					
Other races	ces 512 360		150	443	357	88					
Black	436	318	117	322	281	42					
Hispanic*	151	107	44	255	202	52					
			(Per	cent)							
Total	100	<b>5</b> 9.9	40.1	100	59.9	40.1					
White	100	55.4	44.8	100	57.1	42.9					
Other races	100	70.3	29.3	100	80.6	19.9					
Black	100	72.9	26.8	100	87.3	13.0					
Hispanic*	100	70.9	29.1	100	79.2	20.4					

<sup>\*</sup>Hispanics are also in white, black, and other races categories.

Note.-Details may not add to totals because of rounding.



## **Enrollment Rates, by Metropolitan Residence and Age**

The preprimary school enrollment rate (percent of population enrolled) for children in the central cities was 53 percent; in metropolitan areas outside cities, 57 percent; and in nonmetropolitan areas, 47 percent. The rate difference, although small, is statistically significant (at the .05 level).

By age group, some of the rate differences disappear, while others get larger. Enrollment rates for 5-year-olds are about 85 percent in all three categories. Enrollment rates for 3- and 4-year-olds in central cities and metropolitan areas outside central cities are milar. The 3- and 4-year-olds in nonmetropolitan areas had enrollment rates 8 to 15 percent lower than 3- and 4-year-olds in central cities and areas outside central cities (table 8).

Table 8.—Population and preprimary enrollment, by metropolitan status and by age: 50 States and D.C., fall 1983

	Enrolled children													
Age	Metro	politan cen	tral	Metr	opolitan oth	ner	Nor	Nonmetropolitan						
<u> </u>	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent					
				(Numbe	er, in thousa	ands)								
Total	2,875	1,527	53.1	3,869	2,207	57.1	3,508	1,651	47.1					
3 years	1,014	302	29.8	1,300	422	32.5	1,259	280	22.2					
4 years	928	448	48.3	1,326	715	54.0	1,159	455	39.3					
5 years	932	776	83.3	1,242	1,070	86.1	1,091	916	84.0					

Note.-Details may not add to totals because of rounding.

## **Enrollment Rates and Family Income, by Age and Race**

Enrollment data for fall 1985 show that family income and preprimary enrollment rates are related (table 9). For children from families with incomes of \$35,000 and over, the preprimary enrollment rate is 70 percent; with incomes between \$20,000 and \$35,000, the rate was 58 percent; and with incomes of less than \$20,000, the rate was about 45 percent.

The association between higher income and higher enrollment rates held for 3- and 4-year-olds, but not for

5-year-olds. Enrollment rates for 5-year-olds were about 85 percent in all income categories (table 9).

The noticeably higher enrollment rates for 3- and 4-year-olds in affluent families reflect the fact that most nursery programs are privately operated, and enrollment in these programs is generally associated with the ability to pay. Five-year-olds of different family incomes enrolled at similar rates because 80 percent of kindergarten enrollment is in public programs (table 10).

Total enrollment rates in 1985 were only slightly different for whites and blacks (table 3). Enrollment rates by race and income were also similar, except for the highest income group where the rate was 71 percent for whites and 53 percent for blacks (table 11).



Table 9.—Population and preprimary enrollment, by age and by family income: 50 States and D.C., fall 1983

Age	Total all* incomes		Under \$10,000		\$10,000 to \$19,999		\$20,000 to \$34,999		\$35,000 and over	
	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment
				(1	Number, in	thousands	)			
Total	10,252	5,385	2,554	1,087	2,880	1,339	3,000	1,753	1,495	1,044
3 years	3,573	1,005	967	176	1,003	203	995	348	500	252
4 years	3,413	1,619	820	299	952	356	1,039	559	495	355
5 years	3,266	2,762	768	612	925	779	966	846	500	438
					Perc	ent				
Total	100	52.5	100	42.6	100	46.5	100	58.4	100	69.8
3 years	100	28.1	100	18.2	100	20.2	100	35.0	100	50.4
4 years	100	47.4	100	36.5	100	37.4	100	53.8	100	71.7
5 years	100	84.6	100	79.7	100	84.2	100	87.6	100	87.6

<sup>\*</sup>Total does not include 3,233 preschoo'.rs for whom family income was not reported. Note.—Details may not add to totals oecause of rounding.

Table 10.—Enrollment of 3- to 5-year-olds, in public and private nursery and kindergarten programs, by income: 50 States and D.C., fall 1983

Level	Under \$10,000			\$10,000 to \$19,999			\$20,000 to \$34,999			\$35,000 and over		
Level	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private
					(Num	ber enrolle	ed, in th	nousands	)			
Nursery	394	292	102	495	197	298	823	220	603	576	84	492
Kindergarten	693	636	57	844	692	152	930	693	237	468	315	153
					(1	Percent of	enrolln	nent)				
Nursery	100	74.1	25.9	100	39.8	60.2	100	26.7	73.3	100	14.6	85.4
Kindergarten	100	91.8	8.2	100	82.0	18.0	100	74.5	25.5	10C	67.3	32.7



Table 11.—Population and preprimary enrollment of 3- ... 5-year-olds, by family income and race/ethnicity; 50 States and D.C., fall 1983

Age		Total all <sup>1</sup> incomes		Under \$10,000		000 0,999	\$20,000 to \$34,999		\$35,000 and over	
	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment
				(1	Number, in	thousands	)			
Total	10,252	5,385	2,554	1,087	2,880	1,339	3,000	1,753	1,495	1,044
White	8,336	;	1,641	683	2,404	1,096	2,690	1,561	1,355	959
Other races	1,916	955	913	404	476	243	310	192	140	85
Black	1,555	758	829	366	359	181	227	147	79	42
Hispanic <sup>2</sup>	949	406	384	145	330	145	158	77	48	31
					(Pero	ent)				
Total	100	52.5	100	42.6	100	46.5	100	58.4	100	69.8
White	100	53.1	100	41.6	100	45.6	100	58.0	100	70.8
Other races	100	49.8	100	44.2	100	51.1	100	61.9	100	60.7
Black	100	48.8	100	44.1	100	50.4	100	64.8	100	53.2
Hispanic <sup>2</sup>	100	42.7	100	37.8	100	43.9	100	48.7	100	29.7

<sup>&</sup>lt;sup>1</sup>Total does not include 3,233 preschoolers for whom family income was not reported.

# Enrollment Rates and the Head of Household, by Education Attainment, Race/Ethnicity, Occupation, and Age of Child

The years of school completed by household heads and enrollment rates of their preprimary children are clearly related. The 1983 data show that as education attainment increased, enrollment rates rose—from 40 percent for households headed by someone not completing school beyond 8th grade, to over 70 percent for those headed by someone with 4 or more years of college (table 12).

The relationship between education attainment and enrollment rates differed among whites, blacks, and Hispanics. For each group, higher education was associated with higher enrollment rates. However, in three of the five education categories for household heads, black enrollment rates were higher than white or Hispanic rates. In the elementary education category, black rates were over 8 percent higher than white or Hispanic rates (table 13).

The enrollment rate of preschoolers varied considerably by occupation of the nousehold head (table 14). The rates in 1983 were: Managerial/professional—60 percent; technical/sales/administrative support—60 percent; manual/service—49 percent; and farm—37 percent.<sup>4</sup> Those who were unemployed or not in the labor force enrolled their preprimary children at rates of 39 percent and 44 percent, respectively.

For whites in the two white collar categories, the 'afference in enrollment rates is small; 69 percent for managerial/professional compared to 61 percent for technical/sales/administrative support. For blacks, this difference is large; 75 percent compared to 47 percent (table 15).

Eurollment rates by occupation category of household head also differ by children's ages (table 16). When household head occupation category changes from managerial/professional occupations to manual/service occupations, the enrollment rate for 3- and 4-year-olds declines dramatically; 50 percent to 23 percent for 3-year-olds; and 69 percent to 41 percent for 4-year-olds. For 5-year-olds, enrollment rates are similar among occupation categories. Since occupation and family income are related, it is not surprising that data in table 10 (by incom<sup>2</sup>) and table 16 (by occupation) follow similar patterns.



<sup>&</sup>lt;sup>2</sup>Hispanics are also in white, black, and other races categories.

Note.-Details may not add to totals because of roun ling.

<sup>&</sup>lt;sup>4</sup> See appendix A for definition of occupation categories.

Table 12.—Population and preprimary enrollment, by years of school completed by household head. and by age of child: 50 States and D.C., fall 1983

Age	Elementary 0-8 years		High school 1-3 years		High school 4 years		•	llege years	College 4 or more years	
	Population	Enrollment	Population	Enrollment	Popula:ion	Enrollment	Population	Enrollment	Population	Enrollment
				(	Number, ii	n thousands	s)			
Total	959	381	1,294	523	3,855	1,884	1,809	1,050	2,014	1,418
3 years	329	32	525	92	1,325	329	615	209	653	316
4 years	327	106	394	134	1,295	523	602	330	673	484
5 years	302	242	375	298	1,235	1,032	593	510	689	618
					(Per	cent)				
Total	100	39.7	100	40.5	100	48.9	100	58.0	100	70.4
3 years	100	9.8	100	17.5	100	24.8	100	34.0	100	48.4
4 years	100	32.4	100	33.9	100	40.4	100	54.9	100	72.0
5 years	100	60.1	100	79.4	100	€3.6	100	86.1	100	88.7

Table 13.—Population and preprimary enrollment of 3- to 5-year-olds, by years of school completed by household head, and by race/ethnicity: 50 States and D.C., fall 1983

Race/ethnicity		Elementary 0-8 years		High school I-3 years		High school 4 years		llege years	College 4 or more years	
	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment
				(	Number, in	n thousands	s)			-
Total <sup>1</sup>	959	381	1,294	523	3,855	1,884	1,809	1,050	2,014	1,418
White	714	267	856	337	3,142	1,520	1,571	911	1,801	1,290
Other races	245	114	438	186	713	364	238	139	213	128
Black	187	85	408	167	598	312	199	111	106	63
Hispanic <sup>2</sup>	390	137	162	62	247	121	80	46		_
					(Per	cent)				
Total	104	39.7	100	40.5	100	48.9	100	58.0	100	70 4
White	100	37.4	100	39.3	100	48.4	100	58.0	100	71.6
Other races	100	46.5	100	42.5	100	51.1	100	58.4	100	60.1
Black	100	45.6	100	41.0	100	52.1	100	55.6	100	59.4
Hispanic <sup>2</sup>	100	35.1	100	38.6	100	49.2	100	57.4		_

<sup>-</sup>Number in sample too small to be reliable



<sup>&</sup>lt;sup>1</sup>Total does not include 321 preschoolers for whom no household head was reported.

<sup>&</sup>lt;sup>2</sup>Hispanics are also in white, black, and other races categories.

Note.-Details may not add to totals because of rounding

Table 14.—Population and preprimary enrollment of 3- to 5-year-olds, by occupation and race/ethnicity of household head: 50 States and D.C., fall 1983

Race/ethnicity	Managerial' Professional		Technical Sales/ Administrative Support		Manual/Service		Farin		Unemployed		Not in lab * force	
	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment
					(Numbe	r of child	ren, in th	ousands)			•	
Total	2,068	1,431	1,479	881	4,079	1,987	400	146	697	274	1,209	536
White	1,895	1,304	1,301	789	3,397	1,637	360	132	472	174	659	286
Other races	173	127	178	92	682	350		_	225	100	550	250
Black	104	78	134	63	546	281	_	_	195	87	487	219
Hispanic*	_	_	88	52	431	179		_	118	49	161	<b>5</b> 7
						(Per	cent)					
Total	100	69.2	100	59.6	100	48.7	100	36.5	100	39.3	100	44.3
White	100	68.8	100	60.6	100	48.2	100	36.7	100	37.0	100	43.5
Other races	100	73.4	100	51.7	100	51.3	_		100	44.4	100	45.5
Black	100	75.0	100	47.0	100	51.5		_	100	44.5	100	44.9
Hispanic*			100	59.1	100	41.5		_	100	41.5	100	35.4

<sup>-</sup>Number in sample too small to be reliable.

Table 15.—Population and preprimary enrollment, by age of child and occupation of household head: 50 States and D.C., fall 1983

Age	Managerial/ Professional		Technical Sales/ Administrative Support		Manual/Service		Farm		Unemployed		Not in labor force	
	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment	Population	Enrollment
					(Numbe	r of child	ren, in th	ousands)				
Total	2,068	1,431	1,479	881	4,079	1,987	400	146	697	274	1,209	536
3 years	644	332	493	168	1,396	316	167	24	275	43	451	94
4 years	700	483	478	267	1,388	573	121	39	213	65	390	150
5 years	703	616	508	446	1,295	1,098	112	82	209	166	368	291
						(Per	cent)					
Total	100	69.2	100	59.6	,00	48.7	100	36.5	100	39.3	100	44.3
3 years	100	50.0	100	34.1	100	22.6	100	14.6	100	15.6	100	20.9
4 years	100	69.0	100	55.9	100	41.3	100	32.7	100	30.6	100	38.4
5 years	100	87.6	100	87.9	190	84.8	100	73.5	100	79.7	100	79.2

Note.-Details may not add to totals because of rounding.



<sup>\*</sup>Hispanics are also in white, black, and other races categories

Table 16.—Population and preprimary enrollment, by age group, and by work status of mother: 50 States and D.C., fall 1983

Work status	3-	to 5-year-old	ls		3-year-olds			4-year-olds			5-year-olds	_
of mother	Population	Total enrolled	Enrolled full-day									
					(Nu	mber, in	thousand	is)			_	
Total	9,945	5,230	1,620	3,480	983	347	3,312	1,578	430	3,153	2,669	844
In labor force Employed:	5,160	2,853	1,117	1,803	602	283	1,711	851	319	1,646	1,399	516
full-time	2,960	1,655	782	1,024	349	222	998	510	233	939	939	328
part-time	1,610	923	243	539	188	42	542	277	69	529	458	132
Unemployed	590	275	92	240	65	20	172	64	16	178	146	57
Not in labor force	4,785	2,378	504	1,677	381	65	1,601	727	111	1,507	1,270	328
Keeping house	4,376	2,162	435	1,530	333	53	1,458	656	91	1,389	1,173	292
In school	154	82	31	_	_	_	_	_			_	
Other	254	134	37	91	37	5	87	45	7	77	62	26
						(Pero	cent)					
Total	100	52.6	16.3	100	28.3	9.9	100	47.7	12.9	100	84.6	26.8
In labor force Employed:		55.3	21.6		33.4	15.7		49.7	18.6		85.0	31.3
full-time		55.9	26.5		34.1	21.6		51.1	23.4		84.8	34.8
part-time		57.3	15.1		35.0	7.2		51.2	12.8		86.4	25.0
Unemployed		46.5	15.6		26.9	8.1		37.5	9.2		81.8	32.7
Not in labor force		49.7	10.6		22.7	3.9		45.4	6.9		84.3	21.7
Keeping house		49.4	10.0		21.8	3.4		45.0	6.2		84.5	21.1
In school		53.1	20.3		_	_			_		_	_
Other		52.6	4.6		29.4	5.5		51.4	7.6		84.3	33.5

<sup>-</sup>Number in sample too small to be reliable.

## Enrollment Rates and Mother's Work Status and Marital Status, by Age of Children and Race

Working mothers enroll their preschoolers at a higher rate than non-working mothers; 55 percent compared to 50 percent. Of mothers in the labor force, unemployed mothers enrolled their preschoolers at the lowest rate, 47 percent.

The mother's work status had a major effect on full-day enrollment rates, but only a slight effect on total rates. Working mothers enrolled their preschoolers full-day at twice the rate of non-working mothers; 22 percent to 11 percent. Full-time working mothers enrolled their preschoolers in full-day programs at the rate of 26 percent; compared to part-time or unemployed mothers, at the rate of about 15 percent.

When comparing total enrollment rates and full-day enrollment rates for children of working and non-working mothers, the rates varied in all age groups except one: 5-year-olds. Their total enrollment rates were the same (table 17).

Preprimary enrollment rates by race and mother's work status show that employed white and black mothers enroll their children at the same rate, about 55 percent. Non-working white mothers enroll their children at a higher rate than non-working black mothers; 51 percent to 41 percent (table 18).

The enrollment rate for children whose rather lives with spouse is similar to the rate for children whose mother never married; 53 percent and 46 percent. Enrollment rates differ, however, when race is considered, bire enrollment rates are similar regardless of marital status. White enrollment rate is higher for mothers living with spouse, than for never married mothers; 54 percent to 39 percent (table 18).



Table 17.—Population and preprimary enrollment of 3- to 5-year-olds, by race/ethnicity, and by work status of mother: 50 States and D.C., fall 1983

Work status		White			Other races 1			ادے			Hispanic I	_
of mother	Population	Total enrolled	Enrolled full-day									
					(Nu	mber, ir	thousand	is)				
Total	8,105	4,315	1,138	1,840	915	482	1,490	724	408	935	400	147
In labor force Employed:	4,154	2,307	790	1,006	546	327	842	458	286	404	205	81
full-time	2,336	1,300	554	624	355	228	517	302	202	259	142	62
part-time	1,436	830	193	174	93	50	131	65	39	90	39	14
Unemployed	382	177	43	208	98	49	194	92	47	_		
Not in labor force	3,951	2,007	350	834	371	154	647	266	122	531	195	66
Keeping house	3,675	1,854	317	701	308	118	527	208	87	498	181	60
In school	114	59	19					_			_	
Other	162	94	12	92	40	25	85	38	23		_	_
						(Pero	cent)					
Total	100	53.2	14.1	100	49.7	26.2	100	48.6	27.4	100	42.8	15.8
In labor for a Employed:		55.5	19.0		54.3	32.5		54.4	34.0		50.6	20.2
full-ti >		55.7	23.7		56.9	36.5		58.4	39.0		54.8	23.9
part-time		57.8	13.4		53.4	28.7		49.4	29.2		42.8	15.7
Unemployed		46.4	11.3		47.1	23.6		47.1	24.1			
Not in labor force		50.8	8.9		44.5	18.5		41.2	18.9		36.8	12.4
Keeping house		50.5	8.6		43.9	16.8		39.4	16.5		36.2	12.1
In school		51.6	16.8		53.6	12.9		_	_		_	
Other		57.8	7.8		43.5	27.2		44.6	27.2		_	

<sup>-</sup>Number in sample too small to be reliable.

Table 18.—Population and preprimary enrollment of 3- to 5-year-olds, by race/ethnicity, and by marital status of mother: 50 States and D.C., fall 1983

<u> </u>		Total I			White			Other races <sup>2</sup>			Black			Hispanic <sup>3</sup>		
Marital status of mother	Num	Number Percent		Number			Number			Number			Number			
	Pouplation	Enrolled	Percent	Population	Enrolled	Percent	Population	Enrolled	Percent	Population	Enrolled	Percent	Population	Enrolled	Percent	
Total	10,252	5,385	52.5	8,336	4,430	53.1	1,916	955	49.8	842	458	54.4	949	406	42.7	
Never married Married, spouse	556	255	45.8	188	73	38.7	368	182	49.5	168	86	51.1	-	_	_	
present Other married	8,097	4,325	53.4	7,063	3,794	53.7	1,034	531	51.4	478	272	56.9	748	327	43.7	
status	1,292	651	50.3	854	448	52.4	438	203	46.3	196	100	51.0	117	45	38.3	

<sup>-</sup>Number in sample too small to be reliable.

<sup>&</sup>lt;sup>3</sup>Hispanics are also in white, black, and other races categories.



<sup>&</sup>lt;sup>1</sup>Numbers include blacks.

<sup>&</sup>lt;sup>2</sup>Hispanics are also in white, black, and other races categories.

Total does not include 306 thousand preschool children whose mothers were not present.

<sup>&</sup>lt;sup>2</sup>Numbers include blacks.

### **Appendix A** — **Definitions**

Age—Based on the person's age on birthday before October 1983.

Family—A group of two or more persons related by blood, marriage, or adoption and residing together. All such persons are considered members of one family.

Family income—The combined total money income of all family members before deductions for personal taxes, Social Security, bonds, etc. It is the algebraic sum of wages and salaries, net income from self-employment, and income other than earnings received by all family members during the 12 months before the survey.

Head of household—The person designated as such by the respondent for the household, regardless if he or she is related to other household members by blood, marriage, or adoption. Women are not classified as heads if their husbands are resident members of the family at the time of the survey. "No household head" refers to families in which the household head is a member of the Armed Forces, and not residing at home.

Hispanic origin—Includes persons of Mexican, Puerto Rican, Central American, South American, and other Spanish origin. Totals for Hispanic origin in this report are also included in totals for white, black, and other races.

Kindergarten—A group or class organized to provide educational experiences for children for the year preceding the first grade. A kindergarten class may be organized as a grade of an elementary school or as part of a separate kindergarten school. In some LEA's these groups may be called preprimary, junior primary, or primary.

Marital status of mother—One of three categories: never married; married, spouse present; and other marital status. Mothers who are single but previously married are included in the last category.

Metropolitan area residence—Central City—The population in the hub city of a standard metropolitan statistical area (SMSA) is the metropolitan population.

Metropolitan areas outside cities—population in an SMSA but outside the central city.

Nonmetropolitan areas—population outside SMSA's.

An SMSA is a county or contiguous counties containing at least one city with a population of 50,000 or more, or twin

cities with a combined population of at least 50,000. Contiguous counties are included in an SMSA if they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's are composed of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1980 census and does not include subsequent additions or changes.

Nursery school—A group or class organized to provide educational experience for children during the year or years preceding kindergarten. It includes instruction as an important and integral phase of its program of child care.

Occupations—Taken from the 1980 Standard Occupational Classification Manual, U.S. Department of Commerce.

White collar-Managerial/Professional

White collar—Technical, Sales and Administrative Support

Manual/Service—Includes craft and kindred workers; operatives including transport; and laborers, except farm

Farm workers—includes farmers and farm managers; farm laborers; and farm supervisors.

Part-day and full-day attendance—A child must attend school 2 hours or more to be considered enrolled. A nursery school enrollee may attend only 1 or 2 days per week. A part-day enrollee attends nursery school in either the morning or the afternoon, but not both. A full-day enrollee usually attends nursery school in the morning and the afternoon. Kindergarten attendance is considered part-day (1) if the child usually attends in either the morning or the afternoon, but not both; or (2) if the child attends full-day but not every day of the week. A kindergarten enrollee is considered full-day if he or she attends morning and afterroon classes each day at least 5 days a week.

**Population**—The civilian noninstitutional population in the 50 States and the District of Columbia.

Preprimary program—A set of o.ganized educational experiences for children attending nursery school and kindergarten classes. Such programs may be offered by a public or private school or by some other agency. Children enrolled in Head Start programs are counted under nursery school or kindergarten as appropriate. Institutions offering essentially custodial care, such as day care centers are not included.



Preprimary school enrollment—Total enrollment of regular kindergartens and nursery schools.

**Preschool enrollment**—Total enrollment of regular kindergartens and nursery schools.

**Private school**—Any school or academy controlled or supported primarily by a church or religious organization, or by private persons or organizations.

Public school—Any school controlled or supported primarily by a local, State, or Federal government agency.

Race—National total population data includes whites, blacks, American Indians, Asians, and other races. In this report, whites and blacks have been shown independently. Blacks are also included in totals for other races.



## Appendix B-Source and Reliability of Estimates

Source of data—The estimates in these tables are based or data collected in October 1983 from the Current Population Survey (CPS) of the Bureau of the Census. The monthly CPS deals mainly with labor force data for the civilian noninstitutional population. Questions relating to labor force participation are asked about each member 14 years old and older in each sample household. Supplementary questions regarding school enrollment are asked about all eligible members of the household each October.

The present CPS sample was initially selected from the 1970 census files and is updated continuously to reflect new construction where possible (see "Nonsampling Variability"). The monthly CPS sample is located in 629 areas covering each of the 50 States and the District of Columbia. The CPS sample areas comprise 1,148 counties, independent cities, and minor civil divisions in the Nation. The sample is composed of about 58,000 occupied households eligible for interview each month. Occupants were unavailable for interviews at 2,500 of the sample households.

The estimation procedure used in this survey involves the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race, and sex. These independent estimates are based on statistics from decennial censuses; statistics on births, deaths, immigration, and emigration; and statistics on the Armed Forces.

Reliability of the estimates—Since the estimates in these tables are based on a sample, they may differ from the figures obtained if a complete census had been taken using the same questionnaires, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. The standard errors provided for these tables primarily indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The extent of the nonsampling error is unknown so use care interpreting figures based on a relatively small number of cases or on small differences between estimates.

Nonsampling variability—In survey work, the results are subject to errors of response and nonreporting in addition to sampling variability. Nonsampling errors can be attributed to many sources, e.g., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness

of respondents to provide correct information, inability to recall information, errors made in collection such as in recording or coding the data, errors in processing the data, errors in estimation values for missing data, and failure to represent all sample households and all persons within sample household (undercoverage).

Undercoverage in the CPS results from missed housing units and missed persons within sample households. Overall undercoverage, as compared to the level of the decennial census, is about 7 percent. It is known that CPS undercoverage varies with age, sex, and race. Generally, undercoverage is larger for males than for females and larger for blacks and other races than for whites. Ratio estimation to independent age-sex-race population controls partially corrects for the biases due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics than interviewed persons in the same age-sex-race group. Further, the independent population controls used have not been adjusted for undercoverage in the decennial census.

Sampling variability—The standard errors given in the following tables are primarily measures of sampling variability, that is, of the variations that occur by chance because a sample rather than the whole of the population is surveyed. The sample estimate and its estimated standard error enable one to construct interval estimates that include the average result of all possible samples with a known probability. For example, if all possible samples were selected, each of these surveyed under identical conditions and an estimate and its estimated standard error were calculated for each sample, then:

- Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples;
- Appreximately 95 percent of the intervals from two standard errors below the estimate to two standards errors above the estimate would include the average result of all possible samples.

The average result of all possible samples may or may not be contained in any particular computed interval. However, for a particular sample one can say with confidence that the average result of all possible samples is included within the constructed interval. If many estimates and confidence



B-1

intervals are computed for one study, however, chance errors may affect the level of significance. For example, in calculating twenty 95 percent confidence intervals, one interval not containing the true average result would be expected to occur by chance.

Note when using small estimates—Percent distributions are shown in these tables even when the base of the percentage is less than 75,000. Because of the large standard errors involved, there is little chance that these percentages would reveal useful information. These smaller estimates are provided primarily to permit such combinations of the categories to serve each user's needs.

Standard error tables and their use—To derive standard errors applicable to a large number of estimates at a moderate cost, a number of approximations were required. Therefore, instead of providing an individual standard error for each estimate, generalized sets of standard errors are provided for various sizes of estimated totals and percentages. These sets of standard errors and factors can be used to obtain an indication of magnitude of the standard error of an estimate rether than the precise standard error.

Approximations to the generalized standard errors of estimated totals and estimated percentages are given in tables B-1 and B-2. To compute estimated standard errors for specific characteristics, multiply the factors in table B-3 by the generalized standard errors in table B-1 and B-2. This adjusts for the combined effects of sample design and estimation procedure on the value of the characteristic. When an estimate involves two different categories, use the larger of the two factors corresponding to those categories. For example, to compute approximate standard errors for Hispanic children enrolled in preprimary school for different categories of mother's marital status, multiply the factor of 1.8 from table B-3 by the appropriate standard error from table B-1 or B-2. Generalized standard errors for intermediate values of estimates not shown in tables B-1 and B-2 may be approximated by interpolation.

Table B-1.—Standard errors of estimated totals\*
(In thousands)

Size of estimate	Standard error	Size of estimate	Standard error		
750	40				
10	5	1,000	46		
25	8	1,500	55		
50	11	2,500	66		
100	15	5,000	76		
250	24	7,500	65		
500	33	9,000	43		

<sup>\*</sup>Standard errors of estimate totals provided by the Census Bureau.

Standard errors of estimate totals—The approximate standard error,  $o_x$ , of an estimated total shown in the tabulations may be computed from the standard errors in table B-1 and the factors in B-3 by using the formula

$$o_x = fo$$
 (1)

where "f' is the appropriate factor from table B-3 and o is the standard error on the estimate from table B-1.

Standard errors of estimated percentages—The reliability of an estimated percentage, computed using sample data from both numerator and denominator, depends on both the size of the percentage and the size of the total upon which this percentage is based. Estimated percentages are relatively more reliable than estimates of the corresponding totals in the numerator of the percentage, particularly if the percentages are 50 percent or more. When the numerator and denominator of the percentage are in different categories, use the factor or parameters indicated by the numerator. The approximate standard error,  $o_{(x,p)}$ , of an estimated percentage may be computed using the formula

$$o_{(x,p)} = fo (2)$$

Table B-2.—Standard errors of estimated percentages\*

Estimate		Base of estimated percentage (thousands)													
percentage	10	25	50	75	100	250	500	750	1,000	1,500	2,500	5,000	7,000	9,000	
2 or 98	6.8	4.3	3.0	2.5	2.1	1.4	1.0	.8	.7	.6	.4	.3	.3	.2	
5 or 95	10.6	6.7	4.7	3.9	3.3	2.1	1.5	1.2	1.1	.9	.7	.5	.4	.4	
10 or 90	14.5	9.2	6.5	5.3	4.6	2.9	2.1	1.7	1.5	1.2	.9	.7	.5	.5	
20 or 80	19.4	12.3	8.7	7.1	6.1	3.9	2.7	2.2	1.9	1.6	1.2	.9	7	.6	
35 or 65	23.1	14.6	10.3	8.4	7.3	4.6	3.3	2.7	2.3	1.9	1.5	1.0	.9	.8	
50	24.2	15.3	10.8	8.9	7.7	4.8	3.4	2.8	2.4	2.0	1.5	1.1	.9	.8	

<sup>\*</sup>Use caution comparing percentages computed on a base less than 75,000 The standard errors on these percentages are large so comparisons would not reveal useful information.



Table B-3.—"f" factors\* to be applied to tables B-1 and B-2 to approximate standard errors

Type of Characteristic	Value of "f"
Kindergarten and nursery school enrollment total, white, black or Hispanic children	1.0
Labor force status, occupation, not in labor force—both sexes	
Total, white or black children Hispanic children	1.0 1.4
Female headed households Total, white, or black children	0.9
Hispanic children	1.0
Male headed households	
Total, white, or black children	0.9
Hispanic children	1.2
Mother or family head unemployed  Total or white children	1.0
Black children	1.0 1.0
Hispanic children	0.9
Household members under 14 years, marital status of mother	
Total or white children	1.2
Black children	1.5
Hispanic children	1.8
Years of school completed by mother  Total or white children	0.0
Black children	0.9 1.0
Hispanic children	1.2
Children tabulated by family income	
Total or white children	0.9
Black children	0.9
Hispanic children	1.3

<sup>\*&</sup>quot;f" factors provided by the Census Bureau.

where 'x' is the size of the population subclass forming the base of the percentage, p is the estimated percentage (0 < P < 100), "f" is the appropriate factor from table B-3, and o is the standard error of the estimate from table B-2. When a percentage involves two different categories, use the larger of the two factors corresponding to those categories.

Standard error of a difference—For a difference between two sample estimates, the standard error is approximately equal to

$$o_{(x-y)} = \sqrt{o_x^2 + o_y^2}$$
 (3)

where  $o_x$  and  $o_y$  are the standard errors of the estimates x and y; the estimates can be numbers, percents, ratios, etc. This will represent the estimated standard error accurately for the difference between two estimates of the same characteristic in two different areas, or for the difference between two separate and uncorrelated characteristics in the same area. If, however, there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

Illustration of the use of tables of standard errors—Table 3 shows that in October 1983, an estimated 53.1 percent of white 3- to 5-year-old children were enrolled at the preprimary level. Use of formula 2, which requires interpolation from table B-2 to obtain an unadjusted standard error (approximately .83 for a base of 8,336) and the application of the appropriate "f" factor from table B-3 (1.0 fcr white enrollment), gives a standard error of approximately  $.83 \times 1.0 = .83$ . Therefore, the standard error of the estimate 53.1 percent is .83. The 68 percent confidence interval (±1 standard error) is from 52.3 to 53.9. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we could conclude that the average estimate derived from all possible samples constructed in this way lies within an interval from 51.4 to 54.8 or 2 standard errors (i.e.,  $1.66 = (2 \times .83)$  for roughly for \$5 percent of all possible samples.



Note.—For metropolitan-nonmetropolitan data cross-tabulated with another characteristic, multiply that characteristic's "f" factor by 10 for metropolitan data and 15 for nonmetropolitan data.